

CLAIM AMENDMENTS

1. (Currently Amended) A recombinant DNA molecule which comprises an expression cassette wherein said expression cassette comprises a nucleotide sequence encoding a T-type calcium channel $[[\alpha_1]]$ α_{1G} subunit, said encoding sequence operably linked to control sequences to effect its expression; wherein said $[[\alpha_1]]$ α_{1G} subunit has an amino acid sequence at least 95% 99% homologous to SEQ. ID. No.: 28 24 or SEQ. ID NO. 37.

2. (Currently Amended) The DNA molecule of claim 1 wherein said α_1 subunit has the amino acid sequence of SEQ. ID. No.: 28 24 or SEQ. ID NO. 37.

3. (Cancelled)

4. (Previously Presented) Recombinant host cells modified to contain the DNA molecule of claim 1.

5. (Original) The cells of claim 4 which are mammalian cells.

6. (Original) A method to effect production of a functional calcium channel which method comprises culturing the cells of claim 4 or 5 under conditions wherein said functional calcium channels are produced.

7-13. (Cancelled)

14. (Currently Amended) An isolated nucleic acid molecule which comprises a nucleotide sequence encoding a T-type calcium channel $[[\alpha_1]]$ α_{1G} subunit or its complement, wherein said $[[\alpha_1]]$ α_{1G} subunit has an amino acid sequence at least 95% 99% homologous to SEQ. ID. No.: 28 24 or SEQ. ID NO. 37.

15-17. (Cancelled)

18. (Currently Amended) The isolated nucleic acid molecule of claim 14, wherein said ~~[[α]]~~ α _{1G} subunit has the amino acid sequence of SEQ. ID. No.: ~~28~~ 24 or SEQ. ID NO. 37.